

FREESTYLE PHOTOGRAPHIC SUPPLIES ARISTA® 76 FILM DEVELOPER POWDER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Freestyle Photographic Supplies 5124 Sunset Blvd., Hollywood, CA 90027 Product Name: **ARISTA® 76 FILM DEVELOPER POWDER** Product Number: **736711 Product Use:** Photographic developer **Customer Information Phone Number:** 1-800-292-6137 **CHEMTREC®: 24 Hour Emergency Transport Phone Number:** 1-800-424-9300 Date Reviewed: 02/27/2015 Version: 3.0

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture

Health hazard

Acute toxicity, Oral (Category 4), H302 Serious eye irritation (Category 2), H319 Skin sensitization (Category 1), H317 Germ cell mutagenicity (Category 2), H341 Carcinogenicity (Category 2), H351 Specific organ toxcity Oral (Category 2), Kidney, H373 Acute aquatic toxicity (Category 1), H400

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: WARNING

Hazard statement(s)

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause allergic skin reaction
H318	Causes severe eye damage
H335	May cause respiratory irritation
H361	Suspected of causing genetic defects

MATERIAL SAFETY DATA SHEET



- H351 Suspected of causing cancer
- H373 Specific organ toxicity repeated exposure, Oral (Category 2), Kidney
- H410 Very toxic to aquatic life

Precautionary statement(s)

P302 + P352 P305 + P351 P321 P330 P333 + P313	Obtain special instructions before use Avoid breathing mist Wash skin thoroughly after handling Do not eat, drink, or smoke when using this product Avoid release into the environment Wear protective gloves, eye protection IF SWALLOWED; call a POISON CENTER or doctor/physician if you feel unwell IF ON SKIN: Wash with plenty of soap + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see supplemental first aid instructions on this label). Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse Collect spillage Dispose of contents to an approved waste disposal plant.
P501	Dispose of contents to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
SODIUM SULFITE	7757-83-7	5mg/m³*	5mg/m³*	80-90
BORAX	12179-04-3	5mg/m ^{3*}	10/m³*	1-5
HYDROQUINONE	123-31-9	2mg/m ³	2mg/m ³	1-5
* respirable dust		-	-	

4. FIRST AID MEASURES

4.1 Description of first aid measures

- **Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.
- **Inhalation:** If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- **Ingestion:** Do not induce vomiting. Only induce vomiting at the instruction of medical personnel. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
- **Skin Contact:** Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.
- **Aggravated Medical Conditions:** Individuals who are under the care of a physician or have chronic ailments, should consult a physician before using this product. May cause severe allergic reaction in some asthmatics and sulfite sensitive individuals.

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5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use agent appropriate for surrounding fire.

5.2 Special Hazards arising from substance or mixture

Fire or excessive heat may cause production of hazardous decomposition products. Combustion Products: Carbon dioxide, carbon monoxide, and oxides of sulfur.

5.3 Advise for firefighters

Wear self-contained breathing NIOSH/MSHA approved apparatus and protective clothing to prevent contact with skin and eyes. Fire or excessive heat may produce hazardous decomposition products. Use water to keep containers cool.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Stop the spillage. Pick up and arrange disposal without creating dust. Sweep up and shovel. If in working solution dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions

Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles

Do not store with incompatible materials. Do not store with strong acids. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

See Section 3.

8.2 Exposure controls

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



Personal protective equipment

Eye Protection: Safety glasses with side shields (or goggles).

Respiratory Protection: Avoid breathing dust. Wear approved dust filter respirator if TLV is to be exceeded. Use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.

Skin protection: Latex, rubber, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Respiratory protection: Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance And Odor: Yellow solid, no odor Solubility In Water: Complete Boiling Point: Not applicable Flash Point: Noncombustile solid Flash Point Method: Not applicable Auto ignition: Not applicable LEL: Not applicable **UEL:** Not applicable Vapor Pressure: Negligible Ph: Not applicable Specific Gravity: Not applicable Melting Point: Not available Freezing Point: N.E. **Evaporation Rate: Not applicable** Vapor Density: Not applicable Percent Volatile: 0 Molecular Weight: Not established Pounds Per Gallon: 9.4 V.O.C. is 0.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable

- **10.2 Chemical stability** Conditions To Avoid: Moisture
- **10.3 Possibility of hazardous reactions** No data available



10.4 Conditions to avoid

No data available

10.5 Incompatible Materials

Strong acids will liberate sulfur dioxide, carbon dioxide.

10.6 Decomposition Products

May produce oxides of sulfur and carbon

11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Component information

Hydroquinone 123-31-9

Acute toxicity:367.3 mg/kg (OECD Test Guidance 401)Oral LD-50 (rat)367.3 mg/kg (OECD Test Guidance 402)Dermal LD-50 (rabbit)>2,000 mg/kg (OECD Test Guidance 402)Inhalation: no dataSkin irritation: no dataSkin irritation: no dataEye irritation: no dataRespiratory or Skin Sensitization(in vivo assay – mouse (OECD Test Guidance 429)May cause sensitization by skin contact.
May cause allergic skin reaction.

Carcinogenicity/mutagenicity: none

Sodium Sulfite 7757-83-7

 Acute toxicity:
 3,560 mg/kg

 Oral LD-50 (rat)
 3,560 mg/m³ - 4 h

 Dermal: no data
 >5,500 mg/m³ - 4 h

 Skin irritation:
 Skin - rabbit

 Result: No skin irritation
 Eye irritation:

 Skin – rabbit
 Skin – rabbit

 Result: No skin irritation
 Eye irritation:

 Skin – rabbit
 Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

 Carcinogenicity/mutagenicity: none
 None



Borax pentahydrate 12179-04-3

Acute toxicity:

LD50 (rats) 3,200 to 3,500 mg/kg

Skin corrosion/irritation:

Dermal LD50 (rabbits) 2,000 mg/kg Borax pentahydrate is poorly absorbed through intact skin. Non-irritant.

Serious eye damage/ irritation:

Borax pentahydrate is a serious eye irritant.

Respiratory or skin sensitization:

Borax pentahydrate is not a skin sensitizer.

Germ cell mutagenicity / carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity : Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes. The doses administered were many times in excess of those which humans would normally be exposed to.

12. ECOLOGICAL INFORMATION

Component information

Hydroquinone 123-31-9

12.1 Toxicity

Toxicity to fish	LC50-Oncorhynchusd mykiss (rainbow trout) – 0.4 -0.1 mg/l – 96h
Toxicity to daphnia and other aquatic invertebrates	LC50 – Daphnia magna (Water flea) – 0.13 – 48h
Toxicity to algae	EC50 – Pseudokirchneriella subcapitata (green algae) -0.335 mg/l – 72 h

12.2 Persistence and degradability

Biodegradability

Biotic/Aerobic – exposure time 14d Result: 86% - Readily biodegradable



12.3 Bioaccumulative potential

Bioaccumulation

Leuciscus idus (golden orfe) – 3d – 50 μNo data available Bioconcentration factor (BCF):40

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Sodium Sulfite 7757-83-7

12.1 Toxicity

Toxicity to fish LC50- Gambusia affinis (Mosquito fish) -660 mg/l – 96h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

12.5 Other adverse effects

None

Borax pentahydrate 12179-04-3

12.1. Toxicity Phytotoxicity

Boron is an essential micronutrient for healthy growth of plants; however, it can be harmful to boron sensitive plants in higher quantities. Care should be taken to minimise the amount of borate product released to the environment.

Algal toxicity

Green algae, Pseudokirchneriella subcapitata (Hansveit and Oldersma, 2000) 72-hr EC50 –biomass = 40 mg B/L, or 229 mg boric acid/L.

Invertebrate toxicity

Daphnia, Daphnids, Daphnia magna (Gersich, 1984a) 48-hr LC50 = 133 mg B/L or 760 mg boric acid/L or 619 mg disodium tetraborate , anhydrous/L

Fish toxicity Fish, Fathered minnow, Pimephales promelas (Soucek et al., 2010) 96-



hr LC50 = 79.7 mg B/L or 456 mg boric acid/L or 370 mg disodium tetraborate, anhydrous

12.2. Persistence and degradability

Boron is naturally occurring and ubiquitous in the environment. Borax is a naturally occurring borate.

12.3. Bio-accumulative potentia

Not significantly bio-accumulative.

12.4. Mobility in soil

The product is soluble in water and is leachable through normal soil.

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

DOT (US)

Not regulated

15. REGULATORY INFORMATION

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

	Cas#	Revision Date
Hydroquinone	123-31-9	2007-07-01

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	Cas#	Revision Date
Hydroquinone	123-31-9	2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard



California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA

All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1

Photochemically Reactive: No Maximum Grams of VOC per Liter: 0 g/L Vapor Pressure: 18 mm Hg@ 20 Degrees C

16. OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

Acute toxicity, Oral (Category 4), H302 Serious eye irritation (Category 2), H319 Skin sensitization (Category 1), H317 Acute aquatic toxicity (Category 1), H400

HMIS RATING

Health: 1 Flammability: 0 Reactivity: 0

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.